

What is claimed is:

1. A method for reducing a neurological deficit in a patient who has suffered an injury to the central nervous system, the method comprising administering to
5 the patient an amount of an epidermal growth factor-like (EGF-like) polypeptide effective to reduce a neurological deficit in the patient.
2. The method of claim 1, wherein the injury comprises an ischemic episode.
- 10 3. The method of claim 2, wherein the ischemic episode is a focal ischemic episode.
4. The method of claim 2, wherein the ischemic episode is a global ischemic episode.
5. The method of claim 1, wherein the injury
15 comprises a traumatic injury.
6. The method of claim 1, wherein the EGF-like polypeptide is epidermal growth factor or an EGF receptor-binding fragment or analog thereof.
7. The method of claim 1, wherein the EGF-like
20 polypeptide is transforming growth factor-alpha (TGF α), vaccinia growth factor (VGF), amphiregulin (AR), betacellulin (BTC), epiregulin, or a neuregulin.
8. The method of claim 1, wherein the EGF-like
25 polypeptide is heparin-binding EGF (HB-EGF) or an EGF receptor-binding fragment or analog thereof.

Dep. G. 1

9. The method of claim 8, wherein the EGF receptor-binding fragment comprises the EGF domain of HB-EGF (SEQ ID NO:3).

10. The method of claim 8, wherein the EGF receptor-binding fragment comprises a deletion of 1, 2, 5, or 10 amino acid residues from the amino or carboxy terminals of HB-EGF.

11. The method of claim 10, wherein the EGF receptor-binding fragment comprises amino acid residues 2-208, 6-208, 11-208, 100-208, 100-145, 1-207, 1-202, or 1-198 of SEQ ID NO:2.

12. The method of claim 10, wherein the EGF receptor-binding fragment comprises amino acid residues 82-147 of SEQ ID NO:2 or amino acid residues 63-148 of SEQ ID NO:2.

13. The method of claim 8, wherein the EGF receptor-binding fragment comprises HB-EGF (SEQ ID NO:2) with one conservative amino acid substitution.

14. The method of claim 1, wherein administration of the EGF-like polypeptide commences more than 6 hours after the injury.

15. The method of claim 14, wherein administration of the EGF-like polypeptide commences more than 12 hours after the injury.

16. The method of claim 14, wherein administration of the EGF-like polypeptide commences more than 24 hours after the injury.

17. The method of claim 1, wherein the EGF-like polypeptide is administered intravenously.

18. The method of claim 1, wherein the EGF-like polypeptide is administered intracisternally.

5 19. An EGF-like polypeptide for use in reducing a neurological deficit in a patient who has suffered an injury to the central nervous system.

20. The polypeptide of claim 19, wherein the EGF-like polypeptide is epidermal growth factor or an EGF
10 receptor-binding fragment or analog thereof.

21. The polypeptide of claim 19, wherein the EGF-like polypeptide is transforming growth factor-alpha (TGF α), vaccinia growth factor (VGF), amphiregulin (AR), betacellulin (BTC), epiregulin, or a neuregulin.

15 22. The polypeptide of claim 19, wherein the EGF-like polypeptide is heparin-binding EGF (HB-EGF) or an EGF receptor-binding fragment or analog thereof.

23. The polypeptide of claim 22, wherein the EGF receptor-binding fragment comprises the EGF domain of HB-
20 EGF (SEQ ID NO:3).

24. The use of an EGF-like polypeptide for the manufacture of a medicament for the treatment of a neurological deficit.

add a2